

## ABSTRACT OF THE DISCLOSURE

Methods of generating, and isolating adult stem cells and utilizing such cells and/or embryonic stem cells in generating tissue of a specific function and micro-architecture are provided.

1. A method of generating adult stem cells, comprising:  
a) isolating a population of adult stem cells from a tissue of a specific function and micro-architecture;  
b) culturing the isolated adult stem cells in a medium containing a growth factor;  
c) isolating a population of adult stem cells from the cultured cells.